LISTING OF THE CLAIMS

1.   (Previously Presented) A method for calibrating a voltage controlled oscillator (VCO) comprising:

    providing a serial resistance ladder having a plurality of equal resistors;

    applying a plurality of known voltages to the input of a VCO, wherein the known voltages are available from between each of the resistors;

    monitoring, for each of the voltages, an output count from the VCO over a set interval; and

    storing the output counts for each voltage.

2.   (Canceled)

3.   (Previously Presented) The method of claim 1 wherein the serial resistance ladder and the VCO are constructed on the same integrated circuit.

4.   (Original) The method of claim 1 further comprising:

interleaving a VCO calibration cycle in which known input voltages are substituted for measurements of unknown input voltages.

5.   (Original) The method of claim 1 further comprising:

repeating calibration operations for the same known input voltage at periodic intervals to compensate for variations in operating conditions.

6.   (Original) The method of claim 1 further comprising:

applying an unknown voltage to the VCO input;

monitoring an unknown output count from the VCO over a set interval; and

comparing the unknown output count to a table of stored output counts.

7.   (Original) The method of claim 6 wherein the unknown voltage is measured across a sense resistor with a known resistance, and further comprising:

determining the value of the unknown voltage by relating it to a known voltage that has an equivalent output count; and

calculating a current through the sense resistor using the known resistance and a value determined for the unknown voltage.

8.   (Previously Presented) A system for calibrating a voltage controlled oscillator (VCO) comprising:

a plurality of known voltages, wherein the known voltage are connectable to the VCO; and

a controller coupled to the output of the VCO, wherein the controller maintains a calibration table of VCO output counts, monitored over a set interval, for selected voltage inputs; and

a resistance ladder having a plurality of voltage taps, wherein the voltage taps provide the known voltages.

9.   (Canceled)

10.   (Previously Presented) The system of claim 8 wherein the VCO, the resistance ladder and the controller are constructed on the same integrated circuit.

11.   (Original) The system of claim 8 further comprising:
a plurality of VCOs; and
wherein the controller maintains a separate calibration table for each of the VCOs.

12.   (Previously Presented) A computer program product comprising a computer usable medium having computer readable program code embedded therein, the computer readable program code comprising:

code for selecting a voltage to be applied to inputs of a plurality of voltage controlled oscillators (VCOs), wherein the voltage is selected from one of a plurality of voltage taps on a serial resistance ladder, wherein the voltage taps provide known voltages;

code for monitoring output counts from each of the plurality of VCOs over a set period of time, while the selected voltage is applied to the VCOs' inputs; and

code for storing, for each of the plurality of VCOs, a table of output counts associated with the selected voltage.

13.   (Canceled)

14.   (Original) The computer program product of claim 12 further comprising:

code for interleaving a VCO calibration cycle during which with other VCO measurements.

15.   (Previously Presented) A system for calibrating a voltage controlled oscillator (VCO) comprising:

means for applying a plurality of known voltages to the input of a VCO;

means for monitoring, for each of the voltages, an output count from the VCO over a set interval;

means for storing the output counts for each voltage;

means for applying an unknown voltage to the VCO input, wherein the unknown voltage is measured across a sense resistor with a known resistance;

means for monitoring an unknown output count from the VCO over a set interval; and

means for determining the value of the unknown voltage by relating it to a known voltage that has an equivalent output count; and

means for calculating a current through the sense resistor using the known resistance and a value determined for the unknown voltage.

16.   (Original) The system of claim 15 further comprising:

means for interleaving a VCO calibration cycle in which known input voltages are substituted for measurements of unknown input voltages.

17.   (Original) The system of claim 15 further comprising:

means for repeating calibration operations for the same known input voltage at periodic intervals to compensate for variations in operating conditions.

18.   (Canceled)

19.   (Canceled)